

WHAT IS CLAIMED IS:

1. A method for treating a neurological dysfunction in a subject in need thereof, comprising co-therapy with a therapeutically effective amount of a fructopyranose sulfamate and erythropoietin; wherein the amount of the fructopyranose sulfamate and the amount of the erythropoietin are selected to produce a synergistic effect.
2. The method of Claim 1 wherein the fructopyranose sulfamate is topiramate.
3. The method of Claim 1, wherein the therapeutically effective amount of the fructopyranose sulfamate is from about 10 to 1000 mg.
4. The method of Claim 1, wherein the erythropoietin is epoetin alfa.
5. The method of Claim 1, wherein the therapeutically effective amount of erythropoietin is from about 1 to 15000 I.U./kg.
6. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of acute neurodegenerative disorders and chronic neurodegenerative disorders.
7. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of cerebrovascular insufficiency, focal brain trauma, diffuse brain trauma, spinal cord injury, cerebral ischemia, cerebral infarction, embolic occlusion, thrombotic occlusion, reperfusion following acute ischemia, perinatal hypoxic-ischemic injury, cardiac arrest, intracranial hemorrhage and whiplash shaken infant syndrome.

8. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of Alzheimer's disease, Pick's disease, diffuse Lewy body disease, progressive supranuclear palsy (Steel-Richardson syndrome), multi-system degeneration (Shy-Drager syndrome), chronic epileptic conditions associated with neurodegeneration, motor neuron diseases, amyotrophic lateral sclerosis, degenerative ataxias, cortical basal degeneration, ALS-Parkinson's-Dementia complex of Guam, subacute sclerosing panencephalitis, Huntington's disease, Parkinson's disease, synucleinopathies, primary progressive aphasia, striatonigral degeneration, Machado-Joseph disease / spinocerebellar ataxia type 3 degeneration, olivopontocerebellar degeneration, Gilles De La Tourette's disease, bulbar palsy, pseudobulbar palsy, spinal muscular atrophy, spinobulbar muscular atrophy (Kennedy's disease), multiple sclerosis, primary lateral sclerosis, familial spastic paraplegia, Werdnig-Hoffmann disease, Kugelberg-Welander disease, Tay-Sach's disease, Sandhoff disease, familial spastic disease, Wohlfart-Kugelberg-Welander disease, spastic paraparesis, progressive multifocal leukoencephalopathy, familial dysautonomia (Riley-Day syndrome), prion disease, Creutzfeldt-Jakob disease, Gerstmann-Sträussler-Scheinker disease, Kuru insomnia and fatal familial insomnia.
9. The method of Claim 8, wherein the neurological dysfunction is selected from a group consisting of Alzheimer's disease and Parkinson's disease.
10. The method of Claim 1, wherein the neurological dysfunction is dementia.
11. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of diminished memory, diminished mental capacity and mental deterioration.

12. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of neurological and psychiatric manifestations associated with disease or injury.
- 5 13. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of psychiatric and neurological manifestations associated with peripheral disease.
- 10 14. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of plexopathies, neuropathies, and disorders of the cranial nerves.
- 15 15. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of psychiatric and neurological manifestations associated with an acute neurodegenerative disorder.
- 20 16. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of psychiatric and neurological manifestations associated with a chronic neurodegenerative disorder.
- 25 17. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of psychiatric and neurological manifestations resulting from an epileptic condition.
18. The method of Claim 1, wherein the neurological dysfunction is selected from a group consisting of psychiatric and neurological manifestations of a post-ictal, a post-seizure or an inter-ictal state.

19. The method of Claim 1, wherein the fructopyranose sulfamate is topiramate and the erythropoietin is epoetin alfa.

20. A pharmaceutical composition comprising topiramate, erythropoietin and a pharmaceutically acceptable carrier.

21. A pharmaceutical composition made by mixing topiramate, erythropoietin and a pharmaceutically acceptable carrier.

22. A process for making a pharmaceutical composition comprising mixing topiramate, erythropoietin and a pharmaceutically acceptable carrier.

23. The use of a fructopyranose sulfamate and erythropoietin in the preparation of a medicament for treating:

- (a) an acute neurodegenerative disorder,
- (b) a chronic neurodegenerative disorder,
- (c) dementia,
- (d) memory loss,
- (e) diminished mental capacity,
- (f) mental deterioration,
- (g) a neurological manifestation resulting from disease or injury of any physiological system,
- (h) a psychiatric manifestation resulting from disease or injury of any physiological system,
- (i) a neurological manifestation of peripheral diseases,
- (j) a psychiatric manifestation of peripheral diseases,
- (k) a neurological manifestation resulting from an epileptic condition,
- (l) a psychiatric manifestation resulting from an epileptic conditions,

- (m) a neurological manifestation of a post-ictal, post-seizure or inter-ictal state and
- (n) a psychiatric manifestation of a post-ictal, post-seizure or inter-ictal state, in a subject in need thereof.

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24. The use of topiramate and erythropoietin in the preparation of a medicament for treating:

- (a) an acute neurodegenerative disorder,
- (b) a chronic neurodegenerative disorder,
- (c) dementia,
- (d) memory loss,
- (e) diminished mental capacity,
- (f) mental deterioration,
- (g) a neurological manifestation resulting from disease or injury of any physiological system,
- (h) a psychiatric manifestation resulting from disease or injury of any physiological system,
- (i) a neurological manifestation of peripheral diseases,
- (j) a psychiatric manifestation of peripheral diseases,
- (k) a neurological manifestation resulting from an epileptic condition,
- (l) a psychiatric manifestation resulting from an epileptic conditions,
- (m) a neurological manifestation of a post-ictal, post-seizure state or inter-ictal and
- (n) a psychiatric manifestation of a post-ictal, post-seizure state or inter-ictal, in a subject in need thereof.

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